



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Suk Won CHOI et al.	) )
Application No.: 09/944,099	Group Art Unit: 2871
Filed: September 24, 2001	) Group Art Unit: 2871 E
For: LIQUID CRYSTAL DISPLAY	111 - 1
Commissioner for Patents Washington, DC 20231	
Sir:	AMENDMENT

In response to the Office Action dated December 20, 2002 (Paper No. 4), the period for response to which extends through March 20, 2003, please amend the above-identified application as follows:

### IN THE CLAIMS:

Kindly amend claims 1-4 to read as follows.

1. (Amended) A liquid crystal display including liquid crystal pixel cells arranged at each intersection between a plurality of gate lines and a plurality of data lines, comprising:

a thin film transistor associated with each pixel cell;

a storage capacitor; and

a smectic liquid crystal between an upper substrate and a lower substrate, wherein the smectic liquid crystal has spontaneous polarization in a range of 2nC/cm<sup>2</sup> to 100nC/cm<sup>2</sup> and a unit storage capacitance is in a range of 1nF/cm<sup>2</sup> to 13nF/cm<sup>2</sup> for optimizing transmittance depending on the spontaneous polarization of the smectic liquid crystal.





PATENT

ATTORNEY DOCKET NO.: 054358-5005

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re A	pplication of:	)	4
Suk W	on CHOI et al.	) )	RECORD RECORD
Applica	ation No.: 09/944,099	) Group Art Unit: 2871	REULD 24 2003 FEB 24 2000 FEB 24 CENTER 2800
Filed:	September 24, 2001	Examiner: T. Duong	2003 ENTER
For:	LIQUID CRYSTAL DISPLAY	)	,2800
	issioner for Patents ngton, D.C. 20231		
Sir:	AMENDMENT TRANS	MITTAL FORM	
	Transmitted herewith is an Amendment in re 20, 2002 (Paper No. 4).	sponse to the Office Action dat	ed December
2.	Additional papers enclosed:		
	Information Disclosure Statement Form PTO-1449, references in Citations Declaration of Biological Deposit Submission of "Sequence Listing", co pertaining thereto for biotechnology is acid sequence.	omputer readable copy and/or a	

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#### **Extension of Time** 3.

_	oceedings herein are f r.R. § 1.136(a) apply.	or a patent application	and the provisions of	
	Applicants believe that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicants have inadvertently overlooked the need for a petition and fee for extension of time.			
	Applicants petition for an extension of time, the fees for which are set out in 37 C.F.R. § 1.17(a), for the total number of months checked below:			
	Total Months Requested	Fee for Extension	[Fee for Small Entity]	
	one month two months three months four months	\$ 110.00 \$ 410.00 \$ 930.00 \$ 1,450.00	\$ 55.00 \$ 205.00 \$ 465.00 \$ 725.00	
		due with this requests	\$  d, please consider this a Petition	
	An extension for		been secured and the fee paid therefore for the total months of extension now	
Constr	ructive Petition			
$\boxtimes$	hereby authorized by pendency of this appl which may be require any overpayment to I	this paper to charge a lication including fees ed, including any required posit Account 50-03 ETITION FOR EXTE	.F.R. § 1.18, the Commissioner is ny additional fees during the entire due under 37 C.F.R. §§ 1.16 and 1.17 ired extension of time fees, or credit 310. This paragraph is intended to be a NSION OF TIME in accordance with	

4.

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## 5. Fee Calculation (37 C.F.R. §1.16)

CLAIMS AS	AMENDED					
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	at Rate of	Total Fees
Total Claims (37 C.F.R. §1.16(c))	4	minus	20	0	x \$18 each=	+ \$0.00
Independent Claims (37 C.F.R.§1.16(b))	1	minus	3	0	x \$84 each=	+ \$0.00
[] First presentation of Multiple dependent claim(s) \$280.00			+ \$0.00			
SUB-TOTAL =			\$0.00			
Reduction by ½ for filing by a small entity			- \$0.00			
TOTAL FEE =			\$0.00			

## 6. <u>Fee Payment</u>

$\boxtimes$	No fee is to be paid at this time.
	Please charge Deposit Account No. 50-0310 the amount of \$ for the extension of time fee or fee for claims.
	The Commissioner is hereby authorized to charge any additional fees which may be required, including fees due under 37 C.F.R. §§ 1.16 and 1.17, or credit any overpayment to Deposit Account 50-0310.

Respectfully submitted, MORGAN, LEWIS & BOCKIUS LLP

Dated: February 19, 2003

Victoria D. Hao Reg. No. 47,630

**CUSTOMER NO. 09629** 

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